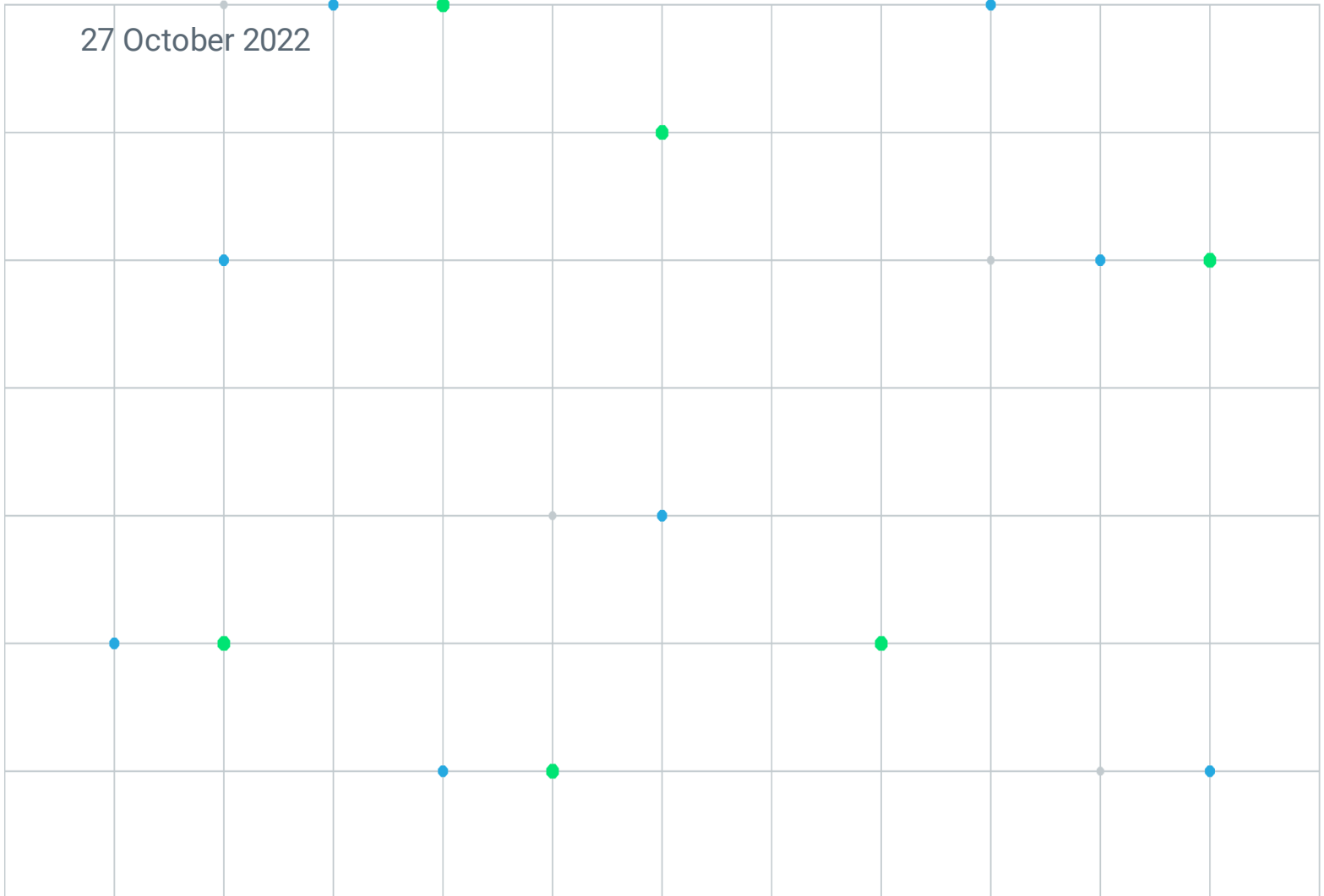


# AutoCert+ Streamlined SBE Equity Indices User Manual



## Disclaimer

---

Neither futures trading nor swaps trading are suitable for all investors, and each involves the risk of loss. Swaps trading should only be undertaken by investors who are Eligible Contract Participants (ECPs) within the meaning of Section 1a(18) of the Commodity Exchange Act. Futures and swaps each are leveraged investments and, because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for either a futures or swaps position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles and only a portion of those funds should be devoted to any one trade because traders cannot expect to profit on every trade. All examples discussed are hypothetical situations, used for explanation purposes only, and should not be considered investment advice or the results of actual market experience.

CME Group, the Globe Logo and CME are trademarks of Chicago Mercantile Exchange Inc. CBOT is a trademark of the Board of Trade of the City of Chicago, Inc. NYMEX is a trademark of New York Mercantile Exchange, Inc. COMEX is a trademark of Commodity Exchange, Inc. All other trademarks are the property of their respective owners.

The information within this manual has been compiled by CME Group for general purposes only. CME Group assumes no responsibility for any errors or omissions. Additionally, all examples in this manual are hypothetical situations, used for explanation purposes only, and should not be considered investment advice or the results of actual market experience. All matters pertaining to rules and specifications herein are made subject to and are superseded by official CME, CBOT and NYMEX rules. Current rules should be consulted in all cases concerning contract specifications.

Copyright © 2023 CME Group Inc. All rights reserved.

---

---

# Table of Contents

---

|   |          |
|---|----------|
| <b>Getting Started</b> .....                                  | <b>4</b> |
| What's New .....  | 5        |
| Interview .....   | 6        |
| <b>Certification Tests</b> .....                              | <b>7</b> |
| Incremental Market Data Refresh .....                         | 8        |
| Security Definition .....                                     | 9        |
| News Message .....  | 10       |
| Recovery via TCP Replay for Equity Indices .....              | 11       |
| Recovery of Security Definition Messages via TCP Replay ..... | 12       |

# Getting Started

Welcome to the CME Group Automated Certification Tool (AutoCert +). The AutoCert + tool is an automated testing tool for validating application functionality. It provides an easy-to-use web interface for walking through CME Group certification scenarios.

To facilitate the process of connecting a customer application to CME Globex, CME Group provides a dedicated certification environment to allow customers to test their systems before they complete certification.

The Equity Indices tests focus on verifying that client systems can receive and process market data in streamlined SBE format.

 **To get started using AutoCert+:**

1. [Log into](#) the automated certification tool.
2. Review the AutoCert+ test suite [navigation](#) and [general interview](#) information.
3. Complete the [Interview](#) for this test suite.
4. Complete the applicable test cases.
5. Complete the certification process from the [Post Certification](#) tab.

## What's New

The following updates have been made to the AutoCert+ Streamlined SBE Equity Indices WebHelp.

| Date        | Topic(s)  | Description                                      |
|-------------|---|--|
| 27 Oct 2022 | Format  | Website and PDF format changes only.             |
| 22 Mar 2017 | <a href="#">Security Definition</a>             | Updated screenshots.                             |
| 24 Oct 2016 | <a href="#">Interview</a>                       | Updated interview screenshot to include Bitcoin. |
|             | <a href="#">Incremental Market Data Refresh</a> | Updated screenshot and discription of test.      |
| 13 Jun 2016 | All   | Initial release.                                 |

# Interview

The interview consists of a series of questions about the trading application being tested. Based on the responses provided, certain tests are mandatory and others are optional. The responses also determine which messages the trading application will receive during the tests.

**Interview** | Test Suite | Test Case | Post Certification

---

**Which Indices will your system support?**

- S&P
- Bloomberg
- Dow Jones
- Bit Coin

**Will your system support News Messages?**

- Yes
- No

**Will your system support Recovery of Security Definition Messages?**

- Yes
- No

**Will your system support Recovery of Equity Indices Messages?**

- Yes
- No

[Complete](#)

# Certification Tests

The AutoCert+ Streamlined SBE Equity Indices certification tests consist of the following:

- [Incremental Market Data Refresh](#)
- [Security Definition](#)
- [News Message](#)
- [Recovery via TCP Replay for Equity Indices](#)
- [Recovery of Security Definition Messages via TCP Replay](#)

# Incremental Market Data Refresh

This test verifies that your application can properly receive and process index pricing data for Market Data Incremental Refresh (tag 35-MsgType=X) messages.

**Note:** This test is mandatory for all customers.

Interview
Test Suite
Test Case
Post Certification

### Steps of the test: Incremental Market Data Refresh

This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step 1.

**Purpose**

The purpose of this test is to verify that your application can properly receive and process index pricing data for Market Data incremental Refresh (tag 35 - MsgType=X) messages.

Please assign a SenderCompID and make sure a valid contract is selected to start certifying a test.

| Description | Flag   | Status     |
|-------------|--|------------|
| 1           | Confirm that your application successfully received and processed the incremental market data refresh (35=X) message | Not Tested |

Key:
● not tested
● complete
● pending
● failed

REFRESH

**To complete an Incremental Market Data Refresh test:**

1. Select a contract from the drop-down and click **Select**.
2. Click **Start Test**.
3. Enter the following tag values from the Market Data Incremental Refresh (35=X) message that your application received.
  - tag 269-MDEntryType
  - tag 270-MDEntryPx
  - tag 9988-MDEntryCode

| Description | Flag   | Status  |
|-------------|--|---|
| 1           | Confirm that your application successfully received and processed the incremental market data refresh (35=X) message<br><br>MDEntryType : <input type="text" value="Bid"/> ▾<br>MDEntryPx : <input type="text"/><br>MD Entry Code : <input type="text" value="Indicative"/> ▾<br><span style="background-color: #ffc107; padding: 2px 5px; font-weight: bold; color: white;">Submit</span> | <div style="display: flex; align-items: center; justify-content: center;"> <span style="color: yellow; font-size: 20px; margin-right: 5px;">●</span> Pending                 </div> |

Click **Submit**:



## Security Definition

This test verifies that your application can properly receive and process Security Definition (tag 35-MsgType=d) messages.

**Note:** This test is mandatory for all customers.

Interview
Test Suite
Test Case
Post Certification

### Steps of the test: Security Definition

This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step 1.

**Purpose**

The Purpose of this test is to verify that your application can properly receive and process Security Definition (tag 35-MsgType=d) messages.

**Selected Contract :** SPGSAMCP - 745 Unlock

| Category           | IP            | Port  |
|--------------------|---------------|-------|
| Incremental Feed A | 224.0.25.126  | 17744 |
| Incremental Feed B | 224.0.25.126  | 18744 |
| TCP Replay         | 69.50.112.139 | 9004  |

**Note:** Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test. START TEST

| Description | Flag   | Status     |
|-------------|--|------------|
| 1           | Confirm that your application successfully received and processed the Security Definition message. Confirm that your application successfully received and processed the Future Security Definition Message. Date/Time format should be entered as: YYYYMMDD | Not Tested |

Key: ● not tested ● complete ● pending ● failed

REFRESH

### ▶ To complete a Security Definition test:

1. Select a contract from the drop-down and click **Select**.
2. Click **Start Test**.
3. Enter the following tag values from the Security Definition (35=d) message that your application received.
  - tag 55-Symbol
  - tag 1145-EventTime (Modification Date and Time)

| Description | Flag   | Status  |
|-------------|--|---------|
| 1           | Confirm that your application successfully received and processed the Security Definition message. Confirm that your application successfully received and processed the Future Security Definition Message. Date/Time format should be entered as: YYYYMMDD | Pending |
|             | Symbol : <input style="width: 100px;" type="text"/>  |         |
|             | Modification Date and Time : <input style="width: 100px;" type="text"/>  |         |
|             | <span style="border: 1px solid #ccc; padding: 2px 10px; color: white; background-color: #f4a460;">Submit</span>  |         |

Click **Submit**.

# News Message

This test verifies that your application can properly receive and process News (tag 35-MsgType=B) messages.

Interview
Test Suite
Test Case
Post Certification

**Steps of the test:** News Messages

This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step 1.

**Purpose**

The Purpose of this test is to verify that your application can properly receive and process News (tag 35-MsgType=B) messages

**Selected Contract :** BCOM - 744 Unlock

| Category           | IP            | Port  |
|--------------------|---------------|-------|
| Incremental Feed A | 224.0.25.126  | 17745 |
| Incremental Feed B | 224.0.25.126  | 18745 |
| TCP Replay         | 69.50.112.139 | 9002  |

**Note:** Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test. START TEST

| Description | Flag  | Status       |
|-------------|---|--------------|
| 1           | Confirm your application successfully received and processed the News (tag 35-MsgType=B) messages | ● Not Tested |

Key: ● not tested ● complete ● pending ● failed

REFRESH

**To complete a News Message test:**

1. Select a contract from the drop-down and click **Select**.
2. Click **Start Test**.
3. Receive the News (35=B) message.
4. Enter the values for the following tags and click **Submit**:
  - tag 148-Headline
  - tag 55-Symbol
  - tag 58-Text

| Description | Flag  | Status    |
|-------------|---|-----------|
| 1           | Confirm your application successfully received and processed the News (tag 35-MsgType=B) messages<br>Headline : <input style="width: 100%;" type="text"/><br>Symbol : <input style="width: 100%;" type="text"/><br>Text : <input style="width: 100%;" type="text"/><br><span style="background-color: #0070c0; color: white; padding: 2px 5px;">Submit</span> | ● Pending |

# Recovery via TCP Replay for Equity Indices

This test verifies that the application can perform a recovery via TCP Replay for Equity Indices.

**Note:** This test is mandatory for all customers.

**Steps of the test: TCP Replay Recovery for Equity Indices**

This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step 1.

| Purpose   |  |
|---|--|
| The Purpose of this test is to verify that your application can properly perform a recovery via TCP Replay for Equity Indices |  |

Selected Contract : SPGSAMCP - 744 Unlock

| Category           | IP            | Port  |
|--------------------|---------------|-------|
| Incremental Feed A | 224.0.25.126  | 17744 |
| Incremental Feed B | 224.0.25.126  | 18744 |
| TCP Replay         | 69.50.112.139 | 9002  |

Note: Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test. START TEST

| Description  | Flag | Status     |
|--|------|------------|
| 1 AutoCert Plus sends some Market Data book updates then creates a gap that needs to be recovered. | ●    | Not Tested |
| 2 Establish a TCP connection and submit a Logon message using your AutoCert+ credentials           | ●    | Not Tested |
| 3 Receive a Logon Confirmation message   | ●    | Not Tested |
| 4 Submit a Market Data Request message   | ●    | Not Tested |
| 5 Receive a recovered message. Did your system receive and process the messages correctly?         | ●    | Not Tested |
| 6 Receive and process a Logout message   | ●    | Not Tested |

Key: ● not tested ● complete ● pending ● failed

REFRESH

## ▶ To complete a Recovery via TCP Replay test:

1. Select a contract from the drop-down and click **Select**.
2. Click **START TEST**.
3. Receive market data messages with a gap of omitted messages.  
Determine the range of missed messages by looking at the sequence numbers (tag 34-MsgSeqNum) in the message headers.
4. Establish a TCP connection and submit a Logon (From Customer to CME) message using AutoCert+ credentials.
5. Receive a Logon (From CME to Customer) message.
6. Submit a Market Data Request (35=V) message.
7. Click **Yes** to confirm that your application received the recovered messages.
8. Receive and process a Logout message.

# Recovery of Security Definition Messages via TCP Replay

This test verifies that the trading application can perform a recovery of Security Definition (tag 35-MsgType=d) messages via TCP Replay for Equity Indices.

Interview
Test Suite
Test Case
Post Certification

### Steps of the test: Recovery of Security Definition messages via TCP Replay

This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step1.

**Purpose**

The Purpose of this test is to verify that your application can properly perform a recovery of a Security Definition (tag 35-MsgType=d) message via TCP Replay for Equity Indices

**Selected Contract:** SPGSAMCP - 744 Unlock

| Category           | IP            | Port  |
|--------------------|---------------|-------|
| Incremental Feed A | 224.0.25.126  | 17744 |
| Incremental Feed B | 224.0.25.126  | 18744 |
| TCP Replay         | 69.50.112.139 | 9002  |

**Note:** Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test. START TEST

| Description | Flag   | Status       |
|-------------|--|--------------|
| 1           | Establish a TCP connection and submit a logon message. Did you receive a logon confirmation message?             | ● Not Tested |
| 2           | Submit a Security Definition Request (tag 35-MsgType=c) message  | ● Not Tested |
| 3           | Receive a recovered Security Definition message ( 35=d) messages. Did you receive a security definition message? | ● Not Tested |
| 4           | Receive and process a Logout message   | ● Not Tested |

Key: ● not tested ● complete ● pending ● failed

REFRESH

## ▶ To complete a Recovery of Security Definition Messages via TCP Replay test:

In steps 1 and 3, click "Yes" to confirm that your application received the messages.

1. Select a contract from the drop-down and click **Select**.
2. Click **START TEST**.
3. Establish a TCP connection and submit a Logon (From Customer to CME) message. Confirm that your application received a logon confirmation message.
4. Submit a Security Definition Request (tag 35-MsgType=c) message.
5. Confirm that your application received the recovered Security Definition (35=d) message.
6. Receive and process a Logout message .